

Harvey Leaves His Mark on the Lake Conroe Dam

The Lake Conroe Division has weathered multiple severe hurricanes, but none quite like Hurricane Harvey. Following Hurricanes Katrina (2005) and Ike (2008), SJRA suffered significant damages to the upstream, rock-hardened face of the Lake Conroe Dam. But those damages were from the high winds and resulting wave action across the large fetch of the reservoir. This "rip rap," as it is often referred to, is sacrificial and is designed to provide a means of dissipating wave energy in order to preserve the underlying clays of the earthen embankment. After each of these previous storms, repair expenses of approximately \$1 million dollars were required to restore the rip rap to its pre-storm condition.



Above: Waves pound the dam during Hurricane Ike



Above: Eroded rip rap following Hurricane Ike

Fortunately, damage to the Lake Conroe Dam as a result of Hurricane Harvey was not nearly as extensive or costly. Harvey was primarily a rainfall event in Montgomery and Walker Counties as opposed to a wind event. The resulting runoff did cause the water surface elevation of the lake to rise a record 5.25 feet. For the dam itself, the elevated water surface elevation combined with strong (albeit less than 50 mph) northeast winds was severe enough to create large waves that directly impacted the north-facing upstream slope of the dam.

Although the energy associated with these waves did result in several areas of minor rip rap erosion, the amount of damage was far less than previous storms and will be easily addressed in the coming months at a much lower cost to the Authority. The Authority has now completed designs to address each area of damage and the necessary repairs for these areas are expected to be completed in the next few months.

During a storm event of any magnitude, it is very important for the Authority to ensure that the flood releases made through the dam spillway are always equal to or less than the flows that would have occurred if Lake Conroe had not been present. Since Lake Conroe is not designed as a flood control reservoir, this requirement is achieved by use of a six-foot vertical "flowage easement" which was purchased for all property around the perimeter of the reservoir. By using this temporary storage area, the Authority has been successful in meeting this criteria for all storms which have historically occurred over the reservoir, including Hurricane Harvey. For Harvey, the peak inflow into the reservoir was almost 130,000 cubic feet per second (CFS) and the peak release rate was kept below 80,000 CFS. This required the use of almost 5.25 feet of the flowage easement, resulting in an historic high level for the reservoir.

After the storm, the Authority engaged contractors to remove various large floating structures and obstacles reported by residents that were creating hazards to safe boating activities. Many structures on the perimeter of the reservoir remain damaged and boaters are reminded to use caution when in the vicinity of these structures since there may be submerged piers or other objects that are not visible below the waterline in these areas. It is the property owner's responsibility to clearly mark any such hazards and timely repair the structures or remove them from the reservoir. If you observe them, please report any such hazards that have not been removed to the shoreline property owners and to the Lake Conroe Division at 936-588-1111.



Above: Debris floating in the Lake Conroe Reservoir from the adjacent structure.

Impact and Damages from Hurricane Harvey – Highlands Division

As Hurricane Harvey made landfall on Friday, August 25, 2017 near Rockport, Texas, the Highlands Division staff were prepared and ready to address any issues or damages that might occur along the 27 miles of canals, levees, and pumping stations, including the various 50+ structures. All staff members were placed on-call to ensure 24-hour coverage and were stationed at the Emergency Operations Center (EOC) in the Highlands and at the Lake Houston Pump Station. Supplies and equipment were prepared in advance and available throughout the storm. Although the Highlands staff did not know it at the time, the impact of unprecedented rainfall amounts from Hurricane Harvey would eventually create multiple challenges in managing water levels throughout the system, causing overflows and damages at various locations.



Above: Total precipitation reflected for the vicinity of the Highlands/Baytown areas as reported by NOAA.

The storm did not begin to impact the Highlands until Saturday afternoon. However, as the storm continued through Wednesday, August 30th, staff eventually experienced many operational challenges from what ended up as over 50-inches of continuous precipitation in the immediate area of Highlands and Baytown. Each day multiple issues throughout the system required attention.

1. Overflows from the northern area of the Highlands Reservoir adjacent to Barbers Hill Road required emergency strengthening of the levee, by-pass pumping, and temporary cuts to another levee to allow reservoir levels to be lowered safely.



Above: Due to extreme rainfall, overflows occurred along "swag areas" located in the northern area of the Highlands Reservoir.

- 2. The base material and geotextile fabric at the siphon located on Sjolander Road was heavily eroded requiring future contractor repairs later this year.
- 3. Multiple locations on the North, South, and East Canal experienced minor slides or sluffing which must be repaired over the next year.



Above: Base material and geotextile fabric was displaced during the storm at the siphon located off of Sjolander Road.

- 4. The basement at the Lake Houston Pump Station flooded due to high water levels in Lake Houston. Fortunately, post-storm inspections of the pumps, motors, and electrical components at the Lake Houston Pump Station revealed no damages to the electrical components.
- 5. Pump No. 1 at the Lake Houston Pump Station developed an imbalance in the upper rotor requiring the pump to run at lower speeds and requiring some minor repairs; however, it was returned to service prior to resumption of water demands in the system.
- 6. Significant debris and fallen trees were deposited on the levees and in the canal. Clean-up, including tree and trash removal, was completed within a few weeks.
- All areas needing repair and maintenance attention were documented post-Harvey via a GIS application to facilitate the application for FEMA financial recovery assistance.

During the event, staff members were extremely responsive and sprang into action to prioritize and address the items of concern. Due to the nature of the event and type of problems experienced, it was required that staff work outside during the storm event including during late nights and early morning hours.



Above: Staff made manual adjustments to gate control structures during the storm event.

Operational demands included manually making adjustments to control gates and changing stop-logs on the Highlands Reservoir in the spillway area to ensure overflows into the HCFCD drainage ditch did not have a negative impact. Internal service roads and even major streets were sometimes impassible and often presented our staff with potentially dangerous conditions resulting from the high water levels. Raw water pumpage was reduced to zero for a brief period due to a drastic reduction in customer demands and their operational limitations that resulted from flooding or by limitations of the customers to receive raw water during and/or after the event. Constant communication with our large industrial customers occurred throughout the event.

The Highlands staff has been actively engaged in the recovery process to ensure collaboration/guidance from the Federal Emergency Management Agency (FEMA) is received timely and proper insurance claims are filed expeditiously. The Authority expects to procure a contractor to address the damage incurred at the Sjolander Road siphon and to make Pump No. 1 repairs at the LHPS. For the various areas that require canal and levee earthwork repairs, the staff in the Highlands will be conducting the work in-house. All labor, supplies, materials, and equipment use for this recovery effort will continue to be recorded to provide support in the Authority's FEMA application for reimbursement of eligible expenses.

Road Expansion Creates Siphon Conflict

SJRA's Highlands Division Siphon No. 7 is located along the Main Canal and crosses under FM 2100 in Crosby, Texas. In February 2015, the Texas Department of Transportation (TxDOT) approached SJRA with a request to relocate and/or modify the existing Siphon No. 7 in order to accommodate their proposed widening of FM 2100. TxDOT's widening proposal requires an additional 20 feet of right-ofway along the western side of the road which interferes with the existing Siphon No. 7 headwalls.



Above: Upstream view of existing Siphon No. 7.

In response to TxDOT's plans to widen FM 2100, SJRA's In-House Design Team with assistance from Texas Water Engineering, PLLC prepared a preliminary engineering report that evaluated siphon improvements to accommodate the proposed road widening. The recommended alternative was to construct a new dual 60-inch siphon structure under FM 2100. The construction cost estimate for the recommended alternative was \$2,706,334, in which SJRA anticipated TxDOT would participate in a portion of the cost. In January 2016, following TxDOT's review of the preliminary engineering report, an additional request was made to evaluate the feasibility of removing the existing siphon and installing a bridge over SJRA's Main Canal.

SJRA performed additional analysis regarding the feasibility of constructing a bridge, which requires SJRA to construct a temporary bypass system to maintain flows in the Main Canal during TxDOT's construction of the bridge. The temporary bypass would be constructed prior to TxDOT's road construction in order to avoid multiple contractors working in the same area. Multiple alternatives for the temporary bypass were evaluated and documented in a technical memorandum, which was presented to TxDOT in September 2017 along with SJRA's recommendation. The construction cost estimate for the recommended alternative for the temporary bypass was \$1,137,882. TxDOT has expressed to SJRA that they would like to move forward with the bridge option for design.

Through recent coordination with TxDOT the current design plan is to replace Siphon No. 7 by constructing a culvert bridge that incorporates dual

4'x8' concrete box culverts. Utilizing this culvert design SJRA obtains adequate capacity for current and future flow demands in the Main Canal. SJRA has tentatively agreed to fund the cost of the temporary bypass, while TxDOT is anticipated to fund the cost to construct the culvert bridge.

Lake Conroe Powers Up

SJRA has recently upgraded the backup power facilities at its Lake Conroe campus. Prior to the project, a single, 10 kW propane generator was available to power only a minimal portion of the Lake Conroe Division's office. This project included installation of a new 70 kW natural gas generator at the office as well as a 30 kW natural gas generator at each of the two operator residences on site.

During events such as Hurricane Harvey, it is critical that SJRA have reliable power to monitor and operate SCADA controls, spillway gates, cameras, and other critical infrastructure at the Lake Conroe Dam. In addition to providing better operational capabilities, the generators will also provide staff, who often are required to work long hours over TxDOT currently plans to let the construction contract for the road widening in January 2019. SJRA and TxDOT are continuously coordinating on project designs and will develop an inter-local agreement to formally agree upon all design and construction requirements and financial responsibilities, along with future operation and maintenance accountabilities of the structure.

multiple days during major storm events, with basic amenities such as functioning septic service, air conditioning/heat, and hot water. The new generators should function at a high level of reliability and provide these capabilities through even the most severe events since they are fueled via CenterPoint Energy buried natural gas fuel lines.

The SJRA Technical Services Department worked closely with various consultants and contractors to design and construct the project. The design included concrete pads, new conduits, electrical racks, electrical panels, and all other necessary appurtenances. Construction and installation for the residence generators are completed and the office generator will be operational and in service by the end of the year



Above: New Generator installation location for the Lake Conroe Division – Adam's Building.

Lake Conroe Watershed Protection Program – Progress Report

The Lake Conroe Watershed Protection Plan (the "Plan") was developed in 2015 by SJRA staff with input from a diverse group of stakeholders who volunteered their time in the Plan development effort. The goal of the Plan is to maintain and, when possible, improve the excellent water quality condition currently present in the Lake Conroe watershed, which encompasses approximately 450 square miles. Over the past few months SJRA has evaluated its progress with ongoing watershed management activities and has summarized the results in a formal report. The current Plan, along with the 2017 Progress Report, can be viewed in their entirety on SJRA's Lake Conroe website (http://www.sjra.net/lakeconroe/). Ongoing management activities include programs for continued water quality monitoring, regulation of On-Site Sanitary Sewage Facilities (OSSF), control of invasive species, enhancement of native aquatic vegetation, Stormwater Inlet Marking (SwIM), and other public outreach activities. More information related to each of these activities can be found in the Plan and recent Progress Report.

Monitoring Water Quality - One of the foremost ongoing management activities is water quality monitoring of the watershed. SJRA participates in and contributes to the Texas Commission on Environmental Quality's (TCEQ's) Clean Rivers Program (CRP) by sampling Lake Conroe and its tributaries at various designated sites on a monthly basis. The United States Geological Survey (USGS) also samples Lake Conroe on a quarterly basis for similar parameters, but includes some additional constituents like silica, iron, manganese, etc. In general, both of these program's sampling results show water quality averages within the TCEQ standards and recommended levels for each tested constituent. Occasional variations in water quality do occur which show some parameters to fall outside the desired level but these spikes typically follow periods of heavy rainfall events. An example of the water quality data from the report is shown on the following page.

Inspecting OSSF Systems - One of the primary sources of bacterial pollutants that was identified during the development of the Plan was from malfunctioning OSSFs. TCEQ has designated SJRA as the authorized agent to implement and enforce TCEQ's On-Site Sewage Facility Order for the area immediately surrounding Lake Conroe SJRA's area of jurisdiction, the Lake Conroe Water Quality Zone, is currently defined as 2,075 feet in all directions horizontally from the lake shoreline defined at elevation 201 feet-msl. SJRA has identified and mapped almost 2,200 OSSF private systems (1,639 Aerobic Treatment Units (ATUs), and 561 conventional systems) within the Water Quality Zone. Since increased enforcement activities began in June 2016, SJRA inspects approximately 8-10 newly constructed OSSF units and approximately 100 existing OSSF units each month. This SJRA program of permitting, inspecting, and conducting complaint investigations and enforcement actions when necessary, should contribute greatly to maintaining future water quality in the Lake Conroe and the shoreline area of the watershed.



Above: Randy Acreman inspects an Aerator on an OSSF System

(Site A)	(Site A) FM 1375 Bridge USGS Data (Average over Last 7 Years)														
	Units	Standard	Тор	Middle	Bottom										
Total Nitrogen	mg/L	N/A	1.09	0.94	1.01										
Organic Nitrogen	mg/L	N/A	0.66	0.62	0.57										
Nitrite	mg/L	N/A	0.00	0.00	0.00										
Nitrate	mg/L	< 0.37	0.27	0.07	0.20										
Ammonia	mg/L	< 0.11	0.60	0.62	0.64										
Orthophosphate	mg/L	< 0.05	0.03	0.04	0.05										
Magnesium	mg/L	N/A	2.49	1.79	2.55										
Chloride	mg/L	N/A	25.42	N/A	26.50										
Sulfate	mg/L	<50.00	7.33	N/A	7.50										
Fluoride	mg/L	N/A	0.15	N/A	0.15										
Silica	mg/L	N/A	11.72	N/A	12.35										
Iron	mg/L	N/A	93.15	84.01	115.64										
Manganese	mg/L	N/A	10.39	58.29	141.43										

Above: USGS Water Quality Data (Average over last seven years)

Sample Location in Water Column	Nitrate (NO₃) (mg/L)	Ammonia (NH₃) (mg/L)	Chloride (Cl) (mg/L)	Sulfate (SO₄) (mg/L)										
FM 1375 Bridge														
Тор	1	0	0	0										
Middle	0	1	0	0										
Bottom	0	7	0	0										
	FM 1097 Bridge													
Тор	0	1	0	0										
Middle	0	1	0	0										
Bottom	0	14	0	0										
		Lake Conroe Dam												
Тор	0	1	0	0										
Middle	0	6	0	0										
Bottom	0	26	0	0										

Above: USGS Quarterly Sampling Data Screening Level Exceedances (Over last Seven Years)



Above: Total Phosphorus Concentrations in Lake Conroe

SwIM Program - Another primary source of potential pollution in the Lake Conroe watershed was identified as stormwater runoff from the surrounding urbanized development around Lake Conroe. To increase public awareness of this potential pollution source, SJRA has implemented a SwIM program for select neighborhoods around Lake Conroe and will continue this activity with the intent to include all residential subdivisions around the lake. The SwIM program is an important educational tool and effective outreach to reduce illicit wastewater discharges and harmful activities by property owners resulting in polluted stormwater entering into the lake. The program gives local communities and volunteer service organizations a chance to become more involved in protecting Lake Conroe water quality by installing metal educational markers on stormwater inlets within neighborhoods that are located in the Lake Conroe watershed. To date, SJRA employees, local utilities, and volunteer service groups have installed a total of 1,761 inlet markers within the Lake Conroe watershed. Thousands of inlets still remain to be marked in the watershed, and SJRA hopes to engage the public further by allowing volunteer groups like Boy Scouts, Girl Scouts, school or civic groups, and others to assist in this effort.

Public Education - SJRA's in-house GIS department has provided significant assistance in many of the ongoing programs to be able to capture locations, develop datasets, and create maps for items like OSSFs, stormwater inlets and outfalls, water quality monitoring stations, aquatic plant program, and other relevant watershed protection information. SJRA's public relations department has produced pamphlets, rack cards, door hangers, magazine articles, website features. and other material to assist in communicating the importance of watershed protection and management to the local community.

<u>Other Watersheds</u> – Improving water quality is not just a Lake Conroe issue. SJRA also participates in another ongoing local watershed activity that is facilitated by The West Fork Watersheds Partnership. The Partnership is currently engaged in developing a watershed protection plan for the West Fork San Jacinto River and Lake Creek watersheds. Additional information and the most recent updates regarding this project can be found at <u>www.westforkwpp.com</u>. SJRA will continue to implement and further develop the Lake Conroe Watershed Protection Plan in 2018 and expand the activities to other parts of the San Jacinto River Basin as funding allows.



Above: Lake Conroe Division SwIM Medallion





Raw Water Enterprise Next Quarter Calendar

December 2017

6^{th}	Region H Regional Water Supply Meeting at SJRA offices
6^{th}	2018 Montgomery County Real Estate/Builders Forecast Lunch at Woodlands Marriott
	Waterway Hotel
12 th	Woodlands Township Drainage Task Force at Township offices
12 th	HGAC West Fork Watersheds Partnership at Montgomery County Central Library
14 th	SJRA Board of Directors Meeting at SJRA offices
January 2018	
17^{th}	Regional Flood Management Council Meeting at H-GAC
25 th	SJRA Board of Directors Meeting at SJRA offices
February 2018	
1 st	Natural Resources Advisory Committee Meeting at H-GAC
22 nd	SJRA Board of Directors Meeting at SJRA offices

Employee Service and Awards Recognition

One Year of Service

Daryl Davis - Highlands Division

Ten Years of Service

Meagan Lee – Lake Conroe Division

Raw Water Usage Data



Lake Level Data





**Lake Level Data: USGS Gauge at Dam, Rainfall & Temperature: SIRA Gauge at Dam, Evaporation & Discharge: Internal Calculation

Lake Conroe and Highlands Division Safety Tailgates

Highland Division Tailgates

- Safety after the Storm *Lynzey Jett*
- Heavy Equipment Safety Kenneth Forrest
- Accident Prevention *Walter Mosley*
- Mold Safety Kim Wright
- Sun Care Safety *Tim Thomas*
- Checking the Canal Levels Safety Kenneth Forest
- Concrete Skin Safety Jarred Thomas
- OSHA Nightmares Safety Video *Charlie McNair*
- Holiday Turkey Frying Safety Daryl Davis

HR/Safety Coordinated Training Activities

- Workplace Violence
- Hearing Conservation and Office Safety

Lake Conroe Division Tailgates

- Bulkhead Construction Safety *Tony Hodges*
- Lockout Tagout Safety Brian Foster
- Cold Weather Safety Michael Biehle
- Generator O&M Safety *Cummins Rep.*
- Fall Protection Safety *Brian Foster*
- Rental Equipment Safety Brian Foster





Raw Water Enterprise First Quarter Financials

San Jacinto River Authority Unaudited Statement of Revenues and Expenses - Raw Water For the Quarter Ending November 30, 2017

	Sep				Oct		Nov						Fiscal Budget				
	A	Actual	Budget		Actual	Budget		Actual	Budget		Actual	Budget	Variance	% Variance		Total Year Budget	Actual YTD % of Total Year Budget
OPERATING REVENUES Industrial/Municipal Irrigation Reservation fees TOTAL OPERATING REVENUES	\$ \$	1,359,586 13,966 10,631 1,384,183	1,360,356 26,621 8,761 1,395,738	\$ \$	1,285,494 \$ 98,125 20,615 1,404,233 \$	1,329,172 5,997 19,246 1,354,415	\$ \$	1,191,202 \$ 97,881 33,276 1,322,358 \$	1,286,774 4,325 27,605 1,318,704	\$ \$	3,836,281 \$ 209,971 64,522 4,110,773 \$	3,976,301 36,943 55,612 4,068,856	\$ (140,02 173,02 8,910 \$ 41,91	1) (4%) 7 468% 0 16% 7 1%	\$ \$	17,007,399 243,926 273,088 17,524,413	23% 86% 24% 23%
OPERATING EXPENSES Payroll & employee benefit expenses Professional fees Purchased & contracted services Supplies, materials & utilities General & administration TOTAL OPERATING EXPENSES	\$	10,071 \$ - - 1,419 11,490 \$	36,699 80,500 213 100 6,581 124,093	\$	14,615 \$ 27,333 - 82 2,820 44,851 \$	36,699 81,250 213 100 6,549 124,811	\$	18,661 \$ 48,484 - 4,353 /1,498 \$	36,699 80,500 213 100 8,072 125,584	\$ \$	43,347 \$ 75,818 82 8,592 127,839 \$	110,098 242,250 638 300 21,202 374,488	\$ 66,75 166,43 63 21 12,60 \$ 246,64	(61%) 2 (69%) 3 (100%) 3 (73%) 9 (59%) 9 (66%)	\$	466,794 967,750 18,550 1,200 90,750 1,545,044	(9%) (8%) 0% (7%) (9%) (8%)
NON-OPERATING REVENUES & EXPENSES Interest expense TOTAL NON-OPERATING (EXCLUDING ITEMS NOT BUDGETED) NET INCOME (LOSS) (EXCLUDING ITEMS NOT BUDGETED)	s s	(31,685) \$ (31,685) \$ 1,341,007 \$	(35,469) (35,469) (35,469)	\$ \$ \$	(31,685) \$ (31,685) \$ 1,327,697 \$	(31,685) (31,685) 1,197,918	\$ \$ \$	(31,685) \$ (31,685) \$ 1,219,174 \$	(31,685) (31,685) 1,161,435	\$ \$ \$	(95,056) \$ (95,056) \$ 3,887,878 \$	(98,840) (98,840) 3,595,529	\$ 3,78 \$ 3,78 \$ 292,34	3 (4%) 3 (4%) 9 8%	\$ \$ \$	(384,008) (384,008) 15,595,360	25% 25% 25%
NON-OPERATING REVENUES & EXPENSES (NOT BUDGETED) Amortized debt issuance expense TOTAL NON-OPERATING (NOT BUDGETED) NET INCOME (LOSS) (BUDGETED AND NOT BUDGETED)	\$ \$ \$	2,719 \$ 2,719 \$ 1,343,726 \$	1,236,176	\$ \$ \$	2,719 \$ 2,719 \$ 1,330,416 \$		\$ \$ \$	2,719 \$ 2,719 \$ 1,221,893 \$		\$ \$ \$	8,156 \$ 8,156 \$ 3,896,034 \$		\$ 8,15 \$ 8,15 \$ 300,50	3 0% 5 0% 5 8%	\$ \$ \$		0% 0% 25%

Highlands Division First Quarter Financials

	Sep				Oct		Nov					_	Fiscal Budget				
	Actual Budget		Actual		Budget	Actual		Budget	Actual		Budget	Variance	% Variance	_	Total Year Budget	Actual YTD % of Total Year Budget	
OPERATING EXPENSES																	
Payroll & employee benefit expenses	\$	186,270 \$	238,941	\$	209,346 \$	238,941	\$	212,724 \$	238,941	s	608,339 \$	716,822	108,482	(15%)	\$	3,071,345	(20%)
Professional fees		943	11,182		10,896	12,167		20,347	10,667		32,186	34,015	1,829	(5%)		136,615	(24%)
Purchased & contracted services		(3,949)	32,032		11,961	32,032		15,793	32,032		23,805	96,097	72,292	(75%)		384,380	(6%)
Supplies, materials & utilities		10,148	37,747		23,182	37,747		18,931	37,747		52,261	113,242	60,981	(54%)		467,347	(11%)
Maintenance repairs, parts & rentals		1,828	120,559		48,926	120,559		43,316	120,559		94,070	361,676	267,606	(74%)		1,446,704	(7%)
General & administration		19,009	42,021		29,131	41,819		34,357	51,539		82,497	135,379	52,883	(39%)		579,465	(14%)
TOTAL OPERATING EXPENSES	\$	214,248 \$	482,482	\$	333,442 \$	483,264	\$	345,468 \$	491,485	\$	893,157 \$	1,457,231	564,073	(39%)	\$	6,085,856	(15%)
NON-OPERATING REVENUES & EXPENSES	s	15 706 \$	1 3 3 3	¢	12 806 5	1 3 3 3	6	4 909 \$	1 333	¢	33.511 8	4.000	29.511	73.9%	¢	16.000	20044
Interest evidence	•	(186 458)	(190 645)	*	(186 458)	(186 458)	*	(186 458)	(186 458)		(559 374)	(563 561)	4 187	(1%)	•	(2 241 684)	25%
Capital contributions		(100,450)	(100,040)		(100,400)	(100,450)		(100,450)	(100,400)		(000,014)	(000,001)	4,107	0%		1 571 279	0%
TOTAL NON-OPERATING (EXCLUDING ITEMS NOT BUDGETED)	\$	(170,753) \$	(189,312)	\$	(173,562) \$	(185,125)	\$	(181,550) \$	(185,125)	\$	(525,864) \$	(559,561) \$	33,698	(6%)	\$	(654,405)	80%
	-	(,, .	(<u> </u>	((-	(-	(,,			(2.1)	-	(
NET INCOME (LOSS) (EXCLUDING ITEMS NOT BUDGETED)	\$	(385,001) \$	(671,793)	\$	(507,003) \$	(668,389)	\$	(527,017) \$	(676,610)	\$	(1,419,021) \$	(2,016,792) \$	597,771	(30%)	\$	(6,740,261)	21%
NON-OPERATING REVENUES & EXPENSES (NOT BUDGETED)																	
Depreciation	\$	(162,454) \$	-	\$	(162,454) \$		s	(162,454) \$	-	\$	(487,362) \$	- \$	(487,362)	0%	s	-	0%
Amortized debt issuance expense		1,261	-		1,261			1,261	-		3,783	-	3,783	0%	_	-	0%
TOTAL NON-OPERATING (NOT BUDGETED)	\$	(161,193) \$	-	\$	(161,193) \$	-	\$	(161,193) \$		\$	(483,578) \$	- 1	(483,578)	0%	\$	-	0%
NET INCOME (LOSS) (BUDGETED AND NOT BUDGETED)	\$	(546,194) \$	(671,793)	\$	(668,196) \$	(668,389)	\$	(688,210) \$	(676,610)	\$	(1,902,600) \$	(2,016,792)	114,192	(6%)	\$	(6,740,261)	28%

San Jacinto River Authority Unaudited Statement of Revenues and Expenses - Highlands For the Quarter Ending November 30, 2017

Lake Conroe Division First Quarter Financials

	Sep			Oct					Nov				Fiscal	Fiscal Budget						
		Actual		Budget		Actual		Budget		Actual	Budget		Actual	Budget		Variance	% Variance		Total Year Budget	Actual YTD % of Total Year Budget
OPERATING REVENUES																				
Permits, licenses & fees	\$	83,661	\$	81,215	\$	58,493	\$	47,684	\$	102,267 \$	73,571	\$	244,421	\$ 202,4	70 \$	41,951	21%	\$	1,045,000	23%
Cost sharing revenue		118,150		275,494		5,163		297,848		336,736	273,208		460,049	846,5	50	(386,501)	(46%)		3,344,068	14%
Grant revenue		-		53,000		-		53,000		-	53,000		-	159,0	00	(159,000)	(100%)		636,000	0%
TOTAL OPERATING REVENUES	\$	201,811	\$	409,709	\$	63,656	\$	398,532	\$	439,003 \$	399,779	\$	704,470	\$ 1,208,0	20 \$	(503,550)	(42%)	\$	5,025,068	149
OPERATING EXPENSES																				
Payroll & employee benefit expenses	\$	154,377	\$	218,056	\$	193,744	\$	218,056	\$	196,443 \$	218,056	\$	544,564	\$ 654,1	38 \$	109,604	(17%)	\$	2,834,220	(19%
Professional fees		9,361		61,638		18,968		61,638		34,052	101,639		62,381	224,9	15	162,535	(72%)		1,139,650	(5%
Purchased & contracted services		23,954		31,915		27,834		31,915		27,063	31,915		78,851	95,74	15	16,895	(18%)		382,966	(21%
Supplies, materials & utilities		12,290		29,542		22,972		29,542		17,887	29,542		53,149	88,6	26	35,477	(40%)		354,455	(15%)
Maintenance repairs, parts & rentals		30,386		114,079		12,514		114,079		35,712	104,450		78,612	332,6	07	253,995	(76%)		1,335,785	(6%
General & administration		56,345		75,624		(21,914)	75,624		87,636	74,179		122,066	225,4	26	103,360	(46%)		924,130	(13%
TOTAL OPERATING EXPENSES	\$	286,712	\$	530,853	\$	254,118	\$	530,853	\$	398,792 \$	559,781	\$	939,623	\$ 1,621,4	38 \$	681,865	(42%)	\$	6,971,205	(13%
NON-OPERATING REVENUES & EXPENSES																				
Interest on investments	\$	33	\$	-	\$	19	\$	-	s	13 \$	-	\$	65	\$-	\$	65	0%	\$	-	0%
Other revenues		250		-		-		-		250	-		500	-		500	0%		-	0%
TOTAL NON-OPERATING (EXCLUDING ITEMS NOT BUDGETED)	\$	283	\$	-	\$	19	\$	-	\$	263 \$	-	\$	565	\$.	\$	565	0%	\$	-	0%
NET INCOME (LOSS) (EXCLUDING ITEMS NOT BUDGETED)	\$	(84,618)	\$	(121,144)	\$	(190,444)\$	(132,322)	\$	40,474 \$	(160,002)	\$	(234,588)	\$ (413,4	58) \$	178,879	(43%)	\$	(1,946,137)	129
NON-OPERATING REVENUES & EXPENSES (NOT BUDGETED)																				
Depreciation	s	(14.844)	s	-	\$	(14,844) \$	-	s	(14.844) S	-	s	(44,532)	s -	s	(44,532)	0%	s	-	0%
TOTAL NON-OPERATING (NOT BUDGETED)	s	(14.844)	ŝ	-	\$	(14.844) \$	-	ŝ	(14.844) \$	-	Š	(44.532)	\$ -	š	(44,532)	0%	š	-	09
	·	(•		-				-	(((-		
NET INCOME (LOSS) (BUDGETED AND NOT BUDGETED)	\$	(99,462)	\$	(121,144)	\$	(205,288) \$	(132,322)	\$	25,630 \$	(160,002)	\$	(279,121)	\$ (413,4)	58) \$	134,347	(32%)	\$	(1,946,137)	149

San Jacinto River Authority Unaudited Statement of Revenues and Expenses - Lake Conroe For the Quarter Ending November 30, 2017